

**REMARKS**

**I. Status of the claims**

By this Amendment, Applicants have amended claims 10, 13, 14, 20, 21, 22, 24 and 34. Applicants have cancelled claims 1-9, 19 and 33 without prejudice or disclaimer of their subject matter. Upon entry of this amendment, claims 10-18, 20-32, and 34 will remain pending under current examination.

In the Office Action of July 25, 2005,<sup>1</sup> the drawings were objected to under 37 C.F.R. 1.84(p)(5) for not including reference signs mentioned in the description; claims 1-9, 19 and 33 were rejected under 35 U.S.C. § 101, as being directed to non-statutory subject matter; claims 1, 2, 10-14, 19-23, 33-34 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,587,835 to *Treyz* ("*Treyz*"); claims 15-18, and 25 were rejected under 35 U.S.C. § 103(a) as unpatentable over *Treyz*; claims 3, 8, and 9 were rejected under 35 U.S.C. § 103(a) as unpatentable over *Treyz* in view of U.S. patent No. 6,266,649 to *Linden* ("*Linden*"); and claims 4-7, 24, and 26-32 were rejected under 35 U.S.C. § 103(a) as unpatentable over *Treyz* and *Linden*, further in view of U.S. Patent No. 6,129,274 to *Suzuki* ("*Suzuki*"). Applicants address the objection and the rejections below.

**II. Objections to drawings**

The Examiner objected to Figure 3 for lacking shopping cart 51. The Examiner objected to Figures 11 and 13 because steps S111, S113, S114, S131, and S134 were

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<sup>1</sup> The Office Action contains a number of statements reflecting characterizations of the related art and the claims. Regardless of whether any such statement is identified herein, Applicants decline to automatically subscribe to any statement or characterization in the Office Action.

not described in the specification. The Examiner further objected to Figure 21 because the specification and figure were inconsistent when describing S212.

In this paper, Applicants have amended the corresponding part of the specification on page 16 to refer to the shopping cart as described in Figure 2. Applicants have amended the corresponding parts of the specification on pages 22, 23, and 24 to add explicit references to steps S111, S113, S114, S131, and S134 . Applicants have also amended the specification on page 29 to correctly refer to step S212. Upon entry of the above amendments to the specification, the drawings will be fully compliant with 37 C.F.R. 1.84(p)(5). Applicants therefore respectfully request that the objection to the drawings be withdrawn.

**III. Rejection of claims 1-9, 19 and 33 under 35 U.S.C. § 101**

The Examiner rejected claims 1-9, 19 and 33 under 35 U.S.C. § 101, as being directed to non-statutory subject matter. According to the Examiner, claims 1-9, 19 and 33 are not within the technological arts and are therefore not permitted under 35 U.S.C. § 101. Applicants disagree.

The Office Action fails to establish that claims 1-9, 19 and 33 are directed to non-statutory subject matter. However, in an effort to advance prosecution, Applicants have cancelled claims 1-9, 19 and 33 without prejudice and disclaimer of the subject matter thereof. The rejection of claims 1-9, 19 and 33 under 35 U.S.C. § 101 is therefore rendered moot by Applicants' amendment.

**IV. Rejection of claims 1, 2, 10-14, 19-23, and 33-34 under U.S.C. § 102(e)**

Applicants traverse the rejection of claims 1, 2, 10-14, 19-23, and 33-34 under U.S.C. § 102(e) because *Treyz* does not teach each and every element of the claims.

In order to properly anticipate Applicants' claimed invention under 35 U.S.C. § 102(e), each and every element of the claim in issue must be found, either expressly described or under principles of inherency, in a single prior art reference. Further, "[t]he identical invention must be shown in as complete detail as is contained in the...claim." See M.P.E.P. § 2131 (8th Ed., Aug. 2001), quoting *Richardson v. Suzuki Motor Co.*, 868 F.2d 1126, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). Finally, "[t]he elements must be arranged as required by the claim." M.P.E.P. § 2131 (8th Ed. 2001), p. 2100-69.

Independent claim 10, as amended, recites a communication unit configured to send the purchase commodity data of the customer to a commodity data management apparatus, and to receive other commodity data from the commodity data management apparatus, the purchase commodity data and the second commodity data being a pair of commodities as a tendency of purchase order of commodities of the customer stored in the commodity data management apparatus.

*Treyz* discloses a system in which a handheld computing device may be used to provide a user with shopping assistance service (See Abstract). *Treyz* further discloses that the user's actions may be monitored to determine the user's interests. For example, if the user frequently responds to clothing advertisements displayed by the handheld computing device, it may be concluded that the user is interested in clothing. This information may then be used to present additional clothing advertisements to the user with handheld computing device 12 (Col. 47, lines 29-36). However, *Treyz* does not teach or suggest "to receive other commodity data from the commodity data management apparatus, the purchase commodity data and the other commodity data

being a pair of commodities as a tendency of purchase order of commodities of the customer,” as recited in claim 10.

Thus, *Treyz* fails to teach each and every element of claim 10. Therefore *Treyz* does not anticipate claim 10 under U.S.C. § 102. Accordingly, Applicants request the withdrawal of the rejection of claim 10, and claims 11-14 which depend from claim 10, and the allowance of claims 10-14.

Claim 20, although of different scope from that of claim 10, recites features similar to those of claim 10. For at least the same reasons discussed above with regard to claim 10, the rejection of claim 20 should also be withdrawn, and claim 20 should be allowed.

Claim 21, although of different scope from that of claim 10, recites features similar to those of claim 10. For at least the same reasons discussed above with regard to claim 10, the rejection of claim 20 should also be withdrawn. The rejection of claims 22-23 should also be withdrawn at least because they depend from claim 21, and claims 21-23 should be allowed.

Claim 34, although of different scope from that of claim 10, recites features similar to those of claim 10. For at least the same reasons discussed with regard to claim 10 above, the rejection of claim 34 should also be withdrawn, and claim 34 should be allowed.

**V.     Rejection of claims 15-18, and 25 under 35 U.S.C. § 103(a)**

Applicants traverse the rejection of claims 15-18 and 25 over *Treyz* under 35 U.S.C. § 103(a) because a case of *prima facie* obviousness has not been established with respect to these claims.

Claims 15-18 depend upon base claim 10; claim 25 depends upon base claim 21. As discussed above, *Treyz* does not teach or suggest each and every feature of claims 10 and 21. For at least the reasons discussed above in connection with claims 10 and 21, the rejection of claims 15-18, and 25 under 35 U.S.C. § 103(a) should be withdrawn and claims 15-18 and 25 should be allowed.

**VI. Rejection of claims 3, 8, and 9 under 35 U.S.C. § 103(a)**

The rejection of claims 3, 8, and 9 over *Treyz* in view of *Linden* under 35 U.S.C. § 103(a) has been rendered moot by Applicants' cancellation of claims 3, 8, and 9.

**VII. Rejection of claims 4-7, 24, and 26-32 under 35 U.S.C. § 103(a)**

The rejection of claims 4-7 under 35 U.S.C. § 103(a) has been rendered moot by Applicants' cancellation of claims 4-7.

Claims 24 and 26-32 depend upon claim 21. As discussed above, *Treyz* does not teach or suggest each and every feature of claim 21. For at least the reasons discussed above in connection with claim 21, the rejection of claims 24 and 26-32 under 35 U.S.C. § 103(a) should be withdrawn and claims 24 and 26-32 should be allowed.

Moreover, Applicants traverse the rejection of claims 24 and 26-32 under 35 U.S.C. § 103(a) because a case of *prima facie* obviousness has not been established with respect to these claims, as currently presented.

Claim 24, as amended, recites "said data analysis unit selects a pair of identification codes of purchase commodities corresponding to the same identification code of the commodity data input and output apparatus, of which an interval between two receiving times is below a predetermined period from the purchase commodity table" (emphasis added).

*Treyz* fails to teach or suggest at least the above subject matter. *Treyz* is directed to a system in which a handheld computing device may be used to provide a user with shopping assistance service (See Abstract). *Treyz* further discloses that the user's actions may be monitored to determine the user's interests. For example, if the user frequently responds to clothing advertisements displayed by a handheld computing device, it may be concluded that the user is interested in clothing. This information may be used to present additional clothing advertisements to the user with handheld computing device 12 (Col. 47, lines 29-36). *Treyz* thus does not teach or suggest, at least, "said data analysis unit selects a pair of identification codes of purchase commodities corresponding to the same identification code of the commodity data input and output apparatus, of which an interval between two receiving times is below a predetermined period from the purchase commodity table," as required by claim 24.

*Linden* does not cure *Treyz*'s deficiencies. *Linden* is directed to a recommendation service recommending items to individual users based on a set of items that are known to be of interest to a community of users (See Abstract). The service generates the recommendation using a previously-generated table which maps items to lists of "similar" items. The similarities reflected by the table are based on the collective interests of the community of users (Abstract). As the Examiner pointed out, these similar items lists, which are based on collective interests of users, can be used to generate a list of recommendations according to the content of a shopping cart (Col. 16, lines 33-40). However, like *Treyz*, *Linden* does not disclose or suggest "said data analysis unit selects a pair of identification codes of purchase commodities corresponding to the same identification code of the commodity data input and output

apparatus, of which an interval between two receiving times is below a predetermined period from the purchase commodity table,” (emphasis added) as required by claim 24.

Further, *Suzuki* does not cure *Treyz* and *Linden*’s deficiencies. *Suzuki* is directed to an electronic personal shopping system for communicating between a customer’s personal memory store and point-of-sale terminals in a retail facility (See Abstract). As shown in Figure 5 of *Suzuki*, a smart card 10 (customer’s personal memory) is adapted to communicate with a kiosk terminal 120 through a card interface unit 122 in a retail facility. The smart card 10 stores a customer’s shopping history data. The kiosk terminal 120 records the customer’s most recent shopping data in the smart card 10 (Col. 13, lines 20-30). Furthermore, by reading and analyzing the customer’s shopping history data, the kiosk terminal 120 personalizes a service to the customer. More particularly, the kiosk terminal 120 makes purchase recommendation for replenishment items by analyzing the last purchase date of necessity items (Col. 14, lines 9-13).

Thus, the process in *Suzuki* checks the last purchasing date of a necessity item, which has no specific correlation to a customer’s current purchase. For example, in a supermarket environment, the kiosk terminal 120 decides whether a predetermined period had past since the customer last purchased necessities such as milk, eggs, and the like (Col. 14, lines 12-13). If so, the kiosk terminal 120 displays a replenishment item recommendation list through the smart card 10 (Col. 14, lines 13-14). However, like *Treyz* and *Linden*, *Suzuki* does not disclose or suggest “said data analysis unit selects a pair of identification codes of purchase commodities corresponding to the same identification code of the commodity data input and output apparatus, of which an

interval between two receiving times is below a predetermined period from the purchase commodity table,” (emphasis added) as required by claim 24.

For at least the foregoing reasons, none of the three references, or any combination thereof, teaches or suggests at least the “said data analysis unit selects a pair of identification codes of purchase commodities corresponding to the same identification code of the commodity data input and output apparatus, of which an interval between two receiving times is below a predetermined period from the purchase commodity table,” as required by claim 24. As such, a case of *prima facie* obviousness has not been established.

Moreover, a case of *prima facie* obviousness has not been established at least because the requisite motivation to combine *Treyz*, *Linden* and *Suzuki* is lacking. Determinations of obviousness must be supported by evidence on the record. See *In re Zurko*, 258 F.3d 1379, 1386 (Fed. Cir. 2001) (finding that the factual determinations central to the issue of patentability, including conclusions of obviousness by the Board, must be supported by “substantial evidence”). Further, the desire to combine references must be proven with “substantial evidence” that is a result of a “thorough and searching” factual inquiry. *In re Lee*, 277 F.3d 1338, 1343-1344 (Fed. Cir. 2002) (quoting *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1351-52).

In this case, the Office Action does not show, by substantial evidence, that a skilled artisan considering *Treyz*, *Linden* and *Suzuki*, not having the benefit of Applicants’ disclosure, would have been motivated to combine those references in a manner resulting in Applicants’ claimed combination. The Examiner generally stated that one of ordinary skill in the art would have combined the references “as the resulting



combination yields the benefits of increasing customer loyalty, and conveniently providing customers with a list of recommend sales of items purchased with regularity” (OA at 23, 26). However, the Office Action did not show that any of the three references suggests the desirability of the alleged combination. That is, although the references could be combined for “the benefits of increasing customer loyalty, and conveniently providing customers with a list of recommend sales of items purchased with regularity,” the Office Action did not show that any of the references “suggests the desirability” of that combination. For these additional reasons, a case of *prima facie* obviousness has not been established with respect to claim 24.

Since claims 26-32 depend upon base claim 24, a case of *prima facie* obviousness has also not been established with respect to these claims. The rejection of claims 24 and 26-32 should be withdrawn for at least reasons set forth above and claims 24 and 26-32 should be allowed.


### **VIII. Conclusion**

The claimed invention is neither anticipated nor rendered obvious in view of the references cited against this application. Applicants request the Examiner’s reconsideration of the application in view of the foregoing, and the timely allowance of the pending claims 10-18, 20-32, and 34.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 06-0916.

Respectfully submitted,

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